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ENVIRONMENTAL IMPACT STATEMENT

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Little Dry Irrigation
Rehabilitation Project

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ENVIRONMENTAL IMPACT STATEMENT
LITTLE DRY WATER USERS' ASSOCIATION

Section I - Proposed Action

The action described in this statement consists of a rehabilitation of an existing irrigation project supported in part through a State loan and involving a State easement for entitlement of use.

Section II - Project Description

This project begins in a southwest quarter of Section 4, T15N, R43E, with a diversion in the Little Dry Creek into a ditch running north to Section 30, T17N, R43E, discharging into Little Dry Creek. This was originally a private project with an earth dam across Little Dry Creek. In the 1930's the Water Conservation Board and the WPA developed what was then known as the Wason Flats Project and was completed in about 1937 or 1938. The project worked fairly well for several years. They were unable to maintain an earth diversion dam above the diversion structure. Various efforts were made to use the ditch by pumping and direct diversion. The ditch was finally abandoned in the early 1940's and the ditch and some of the structures in it have fallen into a state of disrepair. The project as it now stands will not function at all.

The proposed project is to rehabilitate the existing irrigation project. A low level reinforced concrete diversion dam will be built to divert flood flows from the Little Dry Creek. The width of the primary channel of the Little Dry Creek at this point is 120 feet. The diversion structure in the primary channel is also 120 feet wide, with a flashboard arrangement that can be removed so the channel is not restricted during flood flows.

Approximately 61,200 lineal feet of existing canal will be cleaned, reshaped, and in some places rebuilt as required. No major cuts or fills will be required on the canals since this is a rehabilitation of an existing irrigation



project. As specified in the construction plans, the areas disturbed by construction activities must be kept to a minimum. Where designated work does not include a need to disturb the present vegetated ditch side slopes, this shall be left as is.

Structures on the existing canal will be replaced or rebuilt or added as needed. An erosion safe drop structure will be used to reduce erosion where required in connection with turnout installations for lateral ditch service. Also, an erosion safe outlet will be built at the end of the ditch. The ditch is 12 miles long and serves six ranchers and about 1400 acres.

The Little Dry Creek flows once a year in the spring, and is usually dry most of the time. This stream is not a high silt producer. The 150 square mile drainage area is nearly all range land with little or no timber. Because of the intermittent flow of the Little Dry Creek, no fisheries have been established.

All the water diverted during spring flows will be used with little or no water wasted back into the Little Dry Creek. The canal is on a grade of .0004-.0005 feet/foot, so that little or no sediment will be picked up to further increase the sediment load in the Little Dry Creek.

Construction zones will be established as 100 feet on both sides of the center line of the canal and a 300 foot radius around the diversion structure. All areas disturbed by construction activities shall be graded for adequate drainage and provided with a suitable seed bed as specified by the contract inspector. Burrow areas and waste areas will be subject to the same conditions of reclamation. The areas which will be disturbed by construction will be seeded and fertilized under a separate contract. The contract will specify the rate of application of fertilizer and seed, the time of seeding and the method of seeding and ground preparation.

Soil surveys of the areas to be irrigated were conducted by the local Soil Conservation Office. Soils were classified on their capability and type considering slope, erosion, and other features. These classifications helped



to locate the lands most suitable for irrigation under the project.

Section III - Areas of Potential Environmental Impact and Effects.

As a result of this project, efficient conservation practices are being introduced in the area under the Great Plains Program through the Soil Conservation Service. A conservation plan for the area under the Little Dry Water Users' Project will be setup. The plan will include the building of dikes for water spreading, fencing, seeding, seed bed preparation, land leveling and irrigation reorganization. The conservation program will be accomplished in 3-10 years with cost share monies between the SCS and the local landowners. Thus, a conservation practice for the proposed irrigation lands is being initiated during the irrigation rehabilitation. Proper land uses, erosion control and other conservation measures will provide an efficient utilization of the resources involved.

The irrigated lands will be pastured in the summer and fall, thus reducing the grazing pressure on the existing range lands. By rotational grazing and other conservation practices under the Great Plains Program, existing pasture land will not be over-grazed. The project will help to provide additional forage enabling operators to protect and improve their native ranges and obtain increased production from their entire unit.

The animal community of the range and pasture land will be changed somewhat. This will be due to the change in land use, such as from pasture or range land to crop land. As a result of the land use change there will be an increase of population of some animal communities, such as deer and pheasants and there may be a migration or decrease in other animal communities, such as rattlesnakes and prairie dogs.

There will be a more efficient utilization of flood waters in the Little Dry drainage. Some of the flood waters will be diverted and used for irrigation. The diversion of flood water will help reduce the flood peaks and reduce the

amount of erosion from flood waters. The project provides for a beneficial use of water which is presently lost to the area.

This irrigation project will help to stabilize the population in the area by providing a stable economic base for farm and ranch units.

Section IV - Alternative to the Proposed Action.

An alternative to the proposed action would be to do nothing. An economic analysis of the area within the project limits shows very little and in some cases, no net economic return for this land. An economic analysis of the area within the project limits shows a benefit cost ratio of 1.185 to 1. Besides being an economic boost to the area, the environment within the project limits is enhanced by conservation practices being introduced, a more and better wild-life habitat, reduced flood peaks, etc.

The project will serve to maintain and enhance agricultural production, and the economy of the area, both now and in the future for the succeeding generations.

Section V - Commitment of Resources.

There are no irreversible or irretrievable commitment of resources which are involved in the proposed action, should it be implemented, except for materials which will be used to construct various structures.

Section VI - Comments.

Agencies, organizations, and individuals from whom comments are being invited are: The Department of Agriculture; SCS Office, Bozeman; ASCS Office, Bozeman; The State Conservation Committee; Department of Fish & Game; Department of Planning and Economic Development; The Grass Conservation Committee; The Department of State Lands; Little Dry Water Users' Association; Department of Planning and Economic Development; and the Garfield County Commissioners.



LOCATION MAP
scale: 1" = 1/2 mile



Association

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